UNITED STATES PATENT AND TRADEMARK OFFICE

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/892,664	06/28/2001	Steven G. Smith	BS00-353	2057

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ART UNIT	PAPER NUMBER
2654	

DATE MAILED: 04/20/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

	Application No.	Applicant(s)
Office Action Summary	09/892,664	SMITH ET AL.
	Examiner	Art Unit	
	Angela A Armstrong	2654	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE <u>3</u> MONTH(S) FROM
THE MAILING DATE OF THIS COMMUNICATION.
- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed
  after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
  Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any
  earned patent term adjustment. See 37 CFR 1.704(b).

Status

1) ☒ Responsive to communication(s) filed on *27 May 2004*.

2a) ☒ This action is **FINAL**.   2b) ☐ This action is non-final.

3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is
closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4) ☒ Claim(s) *1-20* is/are pending in the application.

   4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5) ☐ Claim(s) _____ is/are allowed.

6) ☒ Claim(s) *1-20* is/are rejected.

7) ☐ Claim(s) _____ is/are objected to.

8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9) ☐ The specification is objected to by the Examiner.

10) ☒ The drawing(s) filed on *05/27/2004* is/are: a)☒ accepted or b)☐ objected to by the Examiner.

   Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

   Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

   a)☐ All   b)☐ Some * c)☐ None of:

   1. ☐ Certified copies of the priority documents have been received.

   2. ☐ Certified copies of the priority documents have been received in Application No. _____.

   3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage
   application from the International Bureau (PCT Rule 17.2(a)).

   * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☐ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
   Paper No(s)/Mail Date _____.

4) ☐ Interview Summary (PTO-413)
   Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

DETAILED ACTION

Drawings

1.   The corrected drawings were received on May 27, 2004. These drawings are acceptable.

Specification

2.   In response to the Office Action mailed March 17, 2004, applicant has amended the specification to correct informalities indicated in the previous Office Action. In consideration of applicant's amendment to the disclosure (title, abstract and specification paragraphs) the objections to the abstract, the disclosure and the title have been overcome.

Claim Objections

3.   In response to the Office Action mailed March 17, 2004, applicant has amended the claims to correct informalities indicated in the previous Office Action. In consideration of applicant's amendment to the claims (replacing the term "Voice" with the term "Speech") the objections to claims 1, 5-7, 12-13 and 17 have been overcome.

Claim Rejections - 35 USC § 103

The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

4.   Claims 1-4, 7-14, 17-20 are rejected under 35 U.S.C. 103(a) as being unpatentable over

Pearson (US 6,023,684) in view of Eberman et al (U.S. Patent 5,805,775 A).

5.   Regarding claims 1 and 7 as understood by the Examiner and claim 16, Pearson reads on

the features of a system for permitting a user to remotely access data as follows:

Pearson reads on the feature of a systems interface to a plurality of legacy systems

(column 1 lines 7-8), the systems interface comprising a first server for managing for protocol

(done by the Web Server 50 in figure 2) and a 2nd server for generating legacy transactions

(done by the Application Server 56 in figure 2) and a firewall that protects the first server and the

second server (firewall 54 and filtering router 44);

Pearson reads on the feature of a computer operable by the user to access data from the

legacy systems through the systems interface (depicted in figure 2 as the process path 28-34-44-

50-56-58-60), where the computer is programmed with a client application for accessing the

systems interface (as happens when a client program initiates a logical session to access the

system, column 4 lines 22- 24), and where the client application is adapted to format requests for

information based on user input (column 4 lines 28-30);

With regard to the singular feature that is particular to claim 7, Pearson reads on the

feature of a communications link coupling the computer and the means for providing an interface

(column 7 lines 37-39).

Regarding the further limits of the claims, the VRU of Pearson lists the considerations

required for voice processing in promotion of his invention (column 2 lines 28 - column 3 line

32) without expressly teaching away from the feature so that his invention in turn could use

speech recognition. Consequently Pearson teaches the feature of a voice input device coupled to

the computer (the VRU of column 2 lines 29- 33), which satisfies the requirement of claim 16,

but does not provide for the further feature of claims 1 and 7, of receiving voice.

Eberman et al, with the invention of an application user interface, also reads on the

feature of a voice input device coupled to the computer (150 in figure 3) and subsequently that

the computer is further programmed with a speech recognition application for receiving voice

input from a user (150 in figure 3) where the speech recognition application is adapted to convert

the voice input into data recognized by the client application (with the processing path from 160-

161-130-500-140-142-212-110 in figure 3). It would have been obvious to a person of ordinary

skill in the art of speech signal processing at the time of the invention to apply the method and/or

teachings of Eberman et al to the device/method of Pearson so as to realize the advantage of

speech input using a microphone or a telephone.

6.   Regarding claim 2, the claim is set forth with the same limits as claim 1. Pearson

(column 8 lines 1 8-34) reads on the feature that the computer logs into the first server over a

wireless communications network (the "other physical connecting configuration" of line 23

column 8) of which special notice is provided that wireless communication was well-known in

the form of cellular and cordless telephones and so would have been obvious to a person of

ordinary skill in the ad of speech signal processing at the time of the invention to apply as a

methods of initiating communication between the user computer/client and the host

server/mainframe.

7.   Regarding claim 3, the claim is set forth with the same limits as claim 1. Pearson reads on

the feature that the computer logs into the first server (with the procedures in column 8 lines 25-

34) over a wire line communications network (from phone to mainframe, column 1 lines 30-33).

8.   Regarding claims 4 and 8 the claims are set forth with the same limits as claims 1 and 7, respectively. Pearson reads on the feature of claim 4 that the data recognized by the client application includes selection of an operation (the service call of column 11 line 10) and information completing a data field for the operation (using data in column 11 lines 10-11).

        This same reference reads on the same features of claim 8 expressed in the alternative regarding the selection of an operation or the input of information into a data field for the operation.

9.   Regarding claim 9, the claim is set forth with the same limits as claim 7. Pearson reads on the feature that user requests are processed by the means for providing an interface in order to generate legacy transactions (done by the Application Server 56 in figure 2).

10.   Regarding claim 10, the claim is set forth with the same limits as claim 7. Pearson reads on the feature of a protocol server (the Web Server 50 in figure 2) and a transaction server (the Application Server 56 in figure 2).

11.   Regarding claim 11, the claim is set forth with the same limits as claim 7. Pearson reads on the features that the protocol server receives the user requests (from 28 in figure 2) and forwards the user requests to the transaction server (50-56 in figure 2), and wherein the transaction server generates legacy transactions based on the user requests (56-58 in figure 2), receives the requested information based on the legacy transactions (56-58 in figure 2), and forwards the requested information to the protocol server (50-56 in figure 2).

12.   Regarding claim 12 as understood by the Examiner, Pearson reads on the features for a system for remotely accessing legacy data through a systems interface to a plurality of legacy systems (28-34-44-50-56-58/60 in figure 2) as follows:

Pearson reads on the feature of a voice input device (VRU of column 2 lines 29-33);

Pearson reads on the feature of a modem (column 1 lines 59-67);

Pearson reads on the feature of a systems interface in communications with the plurality

of legacy systems, wherein the systems interface is protected from the legacy systems by

a firewall (firewall 54 and filtering router 44); and

Pearson reads on the feature of a computer (28 in figure 2) that includes at least one

memory programmed with software for performing the following:

The VRU of Pearson presents considerations required for voice processing in promotion

of his invention (column 2 lines 28 - column 3 line 32) without expressly teaching away from the

feature so that his invention in turn could use speech recognition. Consequently, Pearson teaches

the feature of software for receiving request to input by voice.

Eberman et al, with the invention of an application user interface, also reads on the

feature of a voice input device coupled to the computer (150 in figure 3) and subsequently on the

features of software for:

activating a speech recognition module in response to the request (150 figure 3)

converting voice inputs into a user request for information (with the processing path from

160-161-130-500-140 in figure 3).

sending the user request for information to the systems interface (with the processing

path from 130-500-140-142-212-110 in figure 3);

and receiving data responsive to the user request (with the processing path from 110-20-

112-112 in figure 3). It would have been obvious to a person of ordinary skill in the ad of speech

signal processing at the time of the invention to apply the method/teachings of Eberman et al to

the device/method of Pearson so as to realize the advantage of speech input using a microphone or a telephone.

13.   Regarding claim 13 as understood by the Examiner, the claim is set forth with the same limits as claim 12. Pearson teaches the feature of a client application for preparing the user request based on user inputs (column 2 lines 1-4).

The VRU of Pearson operates using DTMF rather than speech recognition understood from the specification. Consequently. Pearson does not read on the feature of speech recognition understood by the Examiner. Eberman et al (160 in figure 2) reads on the feature of further comprises a speech recognition application for converting the voice inputs into the user inputs. It would have been obvious to a person of ordinary skill in the ad of speech signal processing at the time of the invention to apply the method/teachings of Eberman et al to the device/method of Pearson to provide speech input using a telephone.

14.   Regarding claim 14, the claim is set forth with the same limits as claim 12. The features of the claim are the same as those found in claim 4 and the claim is rejected for the same reason.

15.   Regarding claim 16, Pearson, with the invention for a 3-tier financial transaction system, reads on the claim for a method for allowing a user to access data as follows:

Pearson teaches the feature of logging onto a systems interface to legacy systems (by initiating a session column 4 line 23);

Pearson teaches the feature of receiving voice inputs (with the VRU col. 1 lines 28-32);

Pearson teaches the feature of converting the voice inputs to a user request (column 1 lines 36-42);

Pearson teaches on the feature of sending the user request to the systems interface (column 1 lines 42-45); and

Pearson reads on the feature of receiving data from the systems interface in response to the user request (column 1, lines 48-49).

The VRU of Pearson presents considerations required for voice processing in promotion of his invention (column 2 lines 28 - column 3 line 32) without expressly teaching away from the feature so that his invention in turn could use speech recognition. Consequently, Pearson teaches the feature of software for receiving request to input by voice.

Eberman et al, with the invention of an application user interface, also reads on the feature of a voice input device coupled to the computer (150 in figure 3) and subsequently on the features of software for:

activating a speech recognition module in response to the request (150 figure 3)

converting voice inputs into a user request for information (with the processing path from 160-161-130-500-140 in figure 3).

sending the user request for information to the systems interface (with the processing path from 130-500-140-142-212-110 in figure 3);

and receiving data responsive to the user request (with the processing path from 110-20-112-112 in figure 3). It would have been obvious to a person of ordinary skill in the art of speech signal processing at the time of the invention to apply the method/teachings of Eberman et al to the device/method of Pearson so as to realize the advantage of speech input using a microphone or a telephone.

16.   Regarding claim 17, the claim is set forth with the same limits as claim 16. Pearson teaches the limitations of the feature for receiving a request for input by voice with the VRU (column 2 lines 28 - column 3 line 32). Without teaching away from the first feature, Pearson does not mention speech recognition. Eberman et al, with the invention of an application user interface, also reads on the feature of a voice input device coupled to the computer (150 in figure 3) and subsequently on the features of activating a speech recognition module in response to the request for input by voice (150 figure 3). It would have been obvious to a person of ordinary skill in the ad of speech signal processing at the time of the invention to apply the method/teachings of Eberman et al to the device/method of Pearson so as to realize the advantage of speech input using a telephone.

17.   Regarding claim 18, the claim is set forth with the same limits as claim 16. Pearson teaches the limitations of converting the voice inputs to user inputs (column 1, lines 36-41) and converting the user inputs into the user request (column 1, lines 42-45).

18.   Regarding claim 19, the claim is set forth with the same limits as claim 18. Recounting the existing capabilities available in other prior art to promote his invention, Pearson reads on the feature of selecting an operation or providing information for an operation (with the menu and inputs of column 1 lines 39-40). As the speech feature of this art is provided to illuminate the invention, this reference does not teach against the illustrated implementation of the features.

19.   Regarding claim 20, the claim is set forth with the same limits as claim 18. Pearson reads on the feature of a protocol server (the Web Server 50 in figure 2) and a transaction server (the Application Server 56 in figure 2).

20.   Claim 5 is rejected under 35 U.S.C. 103(a) as being unpatentable over Pearson in view of

Eberman et al and further in view of Douglas (U.S. Patent 5,812,977 A).

21.   Regarding claim 5 as understood by the Examiner, the claim is set forth with the same

limits as claim 1. Pearson teaches the feature where the client application is adapted to present a

plurality of GUI pages to the user (column 2 lines 34-51) but does not stipulate that the page be

active. Douglas, with the invention of a voice control computer interface enabling

implementation of common subroutines, reads on the feature where the speech recognition

application is adapted to convert the voice input to data based on a GUI page that is active

(column 2 lines 58 - column 3 line 1). It would have been obvious to a person of ordinary skill in

the art of speech signal processing at the time of the invention to apply the method/teachings of

Douglas to the device/method of Pearson & Eberman et al to make operation intuitive, thereby

making computer users without fully developed computer skills effective.

22.   Claim 6 is rejected under 35 U.S.C. 103(a) as being unpatentable over Pearson in view of

Eberman et al and further in view of Gould et al (US Patent No. 5,799,279).

23.   Regarding claim 6 as understood by the Examiner, neither Pearson nor Eberman et al

mention multiple vocabularies. Gould et al, with the invention for continuous speech recognition

of text and commands, reads on the feature that the speech recognition application is

programmed with a plurality of vocabularies (column 4 lines 22-44) corresponding to a plurality

of the GUI pages (as depicted in figures 5 and 6). It would have been obvious to a person of

ordinary skill in the ad of speech signal processing at the time of the invention to apply the

method/teachings of Gould et al to the device/method of Pearson & Eberman et al to reduce the resources by loading only those words necessary to the currently active application.

24.   Claim 15 is rejected under 35 U.S.C. 103(a) as being unpatentable over Pearson in view of Eberman et al and further in view of Ditmer et al (U.S. Patent 6,473,407 B1).

25.   Regarding claim 15, the claim is set forth with the same limits as claim 12. Neither Pearson nor Eberman et al are configured to clearly prove separate features of GUI and communication support/layers. Ditmer et al, with the invention of an integrated proxy interface for web-based management tools (in 20-22 in figure 2) arranges the components to read on the features that the client application includes a graphical user interface (GUI) layer and a communications layer (column 6 line 41).

It would have been obvious to a person of ordinary skill in the art of speech signal processing at the time of the invention to apply the method/teachings of Ditmer et al to the device/method of Pearson & Eberman et al in accordance with the well-known principles of structured development, to isolate components related on a platform in such a way that operation and maintenance of a component in one layer can be conducted without disrupting the components in other layers that do not require change.

Response to Arguments

26.   Applicant's arguments with respect to claims 1-20 have been considered but are moot in view of the new ground(s) of rejection.

Conclusion

27.   Applicant's amendment necessitated the new ground(s) of rejection presented in this

Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a).

Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE

MONTHS from the mailing date of this action. In the event a first reply is filed within TWO

MONTHS of the mailing date of this final action and the advisory action is not mailed until after

the end of the THREE-MONTH shortened statutory period, then the shortened statutory period

will expire on the date the advisory action is mailed, and any extension fee pursuant to 37

CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event,

however, will the statutory period for reply expire later than SIX MONTHS from the date of this

final action.

Any inquiry concerning this communication or earlier communications from the

examiner should be directed to Angela A Armstrong whose telephone number is 571-272-7598.

The examiner can normally be reached on Monday-Thursday 11:30-8:00 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's

supervisor, Richemond Dorvil can be reached on 571-272-7602. The fax phone number for the

organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent

Application Information Retrieval (PAIR) system. Status information for published applications

may be obtained from either Private PAIR or Public PAIR. Status information for unpublished

applications is available through Private PAIR only. For more information about the PAIR

system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR

system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Angela A Armstrong
Examiner
Art Unit 2654

AAA
April 12, 2005